REMARKS

This is in response to the Office Action mailed on April 18, 2007.

Claims 1, 7, 9, 12, 23 and 27 are amended, no claims are canceled, and no claims are added; as a result, claims 1-27 are now pending in this application.

Objection to the Specification

The disclosure is objected to because of the following informalities:

a. "Jeffrey" is misspelled in paragraph [0039].

b. The abbreviation, "dist." should be spelled out to read "distribution" in paragraph [0037].

c. The term "doe" is missing the letter "s", paragraph [0027].

d. Reference characters described for figure 6, are not as disclosed in the drawing for figure 6.

Applicant has amended the specification to overcome the objections.

Because Applicant has amended FIG. 6 by replacing reference characters 210, 220, 202, 204, 206, 208, 212, 214, 216 and 218 with reference characters 610, 620, 602, 604, 606, 608, 612, 614, 616 and 618, Applicant believes that reference characters described in the specification for FIG. 6 are as disclosed in the amended FIG. 6.

§112 Rejection of the Claims

Claim 23 was rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Applicant has amended claims 23 and 12 as follows, and believes that such amendment overcomes the rejection of claim 23 under 35 USC § 112, second paragraph.

> 23. (Currently Amended) The method of claim 16 wherein a ~~divergence measure~~ (modified Jeffery's measure ~~as defined above~~) is used to determine a match or non-match in the distributions.

12. (Currently Amended) The method of claim 1 wherein the frames comprise pixels, and where such pixels are grouped in blocks of pixels, each block being represented as an ~~a single (i.e.~~ average or median~~) unit~~ in the color domain.

§102 Rejection of the Claims

Claims 1-15 and 27 were rejected under 35 USC § 102(b) as anticipated by Monroe (US-2003/0025599, hereinafter referred to as "Monroe"). Applicant reserves the right to swear behind this reference at a later date. Applicant traverses the §102 rejection of claims 1-15 and 27 for at least the reason that Monroe does not describe performing two different performance levels of motion detection to different portions of an image as claimed.

Anticipation requires the disclosure in a single prior art reference of each element of the claim under consideration. *In re Dillon* 919 F.2d 688, 16 USPQ 2d 1897, 1908 (Fed. Cir. 1990) (en banc), cert. denied, 500 U.S. 904 (1991). It is not enough, however, that the prior art reference discloses all the claimed elements in isolation. Rather, "[a]nticipation requires the presence in a single prior reference disclosure of each and every element of the claimed invention, *arranged as in the claim*." *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984) (citing *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983)) (emphasis added).

Applicant respectfully submits that the Office Action did not make out a *prima facie* case of anticipation, because Monroe does not disclose each and every element of Applicant's claims arranged as in the claims.

Applicant amended claim 1 by incorporating some features of claim 9. Now, amended claim 1 recites (with emphasis added):

1. (Currently Amended) A method of detecting motion in an area, the method comprising:

receiving frames of the area;

using a high speed motion detection algorithm to remove frames in which a threshold amount of motion is not detected; and

using a high performance motion detection algorithm on remaining frames to detect true motion from noise,

wherein **the high performance detection algorithm operates on frames having pixels in grey scale for selected portions of images, and operates on**

frames having pixels in RGB or other color domain for other portions of the images.
(Emphasis added)

Applicant submits that Monroe fails to show the feature "the high performance detection algorithm operates on frames having pixels in grey scale for selected portions of images, and operates on frames having pixels in RGB or other color domain for other portions of the images" as recited in amended claim 1.

Referring to paragraph [0118] of Monroe, relied upon by the Office Action when rejecting original claim 9,

> "..... the algorithm need not analyze the color components of the camera video. In actual use, the algorithm need only analyze the luminance (gray-scale) differences between the captured frames."

From the above quotation of Monroe, it can be seen clearly that only one performance level, grey-scale, is used for an entire image. Monroe fails to show an additional high performance detection algorithm "operates on frames having pixels in RGB or other color domain for other portions of the images" as recited in amended claim 1.

Monroe describes using a single performance level of motion detection for an image, and also refers to decimating the image to make the detection faster. This further supports the interpretation of Monroe as only describing a single performance level for each image, not two different performance levels for different portions of an image as recited in claim 1. Again referring to paragraph [0118] of Monroe, relied upon by the Office Action when rejecting original claim 9,

> "..... Difference analysis of every single pixel may be time-consuming and may unnecessarily over utilize the computing resources within the camera. For these reasons, it is preferable to decimate the captured scenes by some amount prior to the difference analysis. For example, the algorithm might use every second pixel horizontally and every other line vertically, or every fourth pixel and every fourth line, etc. Such decimation results in substantially faster detection without meaningful loss of motion detection resolution."

Note that the decimation is done to "every other line", or "every fourth pixel", or "every fourth line". The word "every" is used in describing each decimation scheme, which clearly

means a decimation scheme is applied to all the pixels. Clearly, there are not two different performance level motion detections performed on different portions of an image.

In reviewing original claim 9, the Office Action states,

> "..... in order to represent color, luminance is accompanied by two-color difference component chrominance. Furthermore, luminance and chrominance are just components of video, and since the system performs with luminance, it would be in turn inherent that it would be able to perform with chrominance."

The above statement of the Office Action argues that the system of Monroe performs with luminance, thus inherently would be able to perform with chrominance, however such argument of the Office Action cannot lead to the conclusion that Monroe discloses the feature "the high performance detection algorithm operates on frames having pixels in grey scale for selected portions of images, and operates on frames having pixels in RGB or other color domain for other portions of the images" as recited in amended claim 1. Further, the statement of inherency is respectfully traversed, as the Office Action has not shown how the allegedly inherent characteristic necessarily flows from the teaching of Monroe. While the Office Action states that luminance and chrominance are just components of the video, there is no evidence that the components may be processed in the same manner with respect to motion detection. Sound may also be a component of video, which does not represent motion.

The Office Action does not point out and Applicant cannot find any part of Monroe discloses the feature "the high performance detection algorithm operates on frames having pixels in grey scale for selected portions of images, and operates on frames having pixels in RGB or other color domain for other portions of the images" as recited in amended claim 1, thus does not disclose each and every element of amended claim 1. Accordingly, Monroe does not anticipate amended claim 1.

Amended independent claim 27 has the similar features to amended independent claim 1. The argument discussed for claim 1 also apply to claim 27, thus Monroe does not anticipate amended independent claim 27 either. Claims 2-15 directly or indirectly depend on claim 1. Thus, for at least the same reason discussed for claim 1, Monroe does not anticipate these dependent claims.

Applicant respectfully requests reconsideration and allowance of claims 1-15 and 27.

§103 Rejection of the Claims

Claims 16-26 were rejected under 35 USC § 103(a) as being unpatentable over Monroe in view of Pavlids et al.: Urban Surveillance Systems, 2001 (hereinafter referred to as "Pavlids"). Applicant reserves the right to swear behind these references at a later date. Applicant traverses the §103(a) rejection of claims 16-26 for the reason stated below.

In order for the Examiner to establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Applicant respectfully submits that the Office Action did not make out a *prima facie* case of obviousness, because, even combined, Monroe and Pavlids do not teach or suggest each and every element of claims 16-26.

Claim 16 recites (with emphasis added):

> 16. (Original) A method of detecting motion in an area, the method comprising:
> receiving frames of the area;
> using a high speed motion detection algorithm to remove frames in which a threshold amount of motion is not detected;
> using a high performance motion detection algorithm on remaining frames to detect true motion from noise, wherein **the frames comprise pixels, and where such pixels are grouped in blocks of pixels, each block being represented as a single average pixel**; and
> initializing a model of the area comprising multiple weighted distributions for each block of pixels.
> (Emphasis added)

The Office Action asserts, "Regarding claim 16, which is substantially the same as claim 1 in addition to each block being represented as initializing a model of the area comprising multiple weighted distributions for each block of pixels. Thus, the analysis and rejection for claim 1 apply here for subject matter."

Applicant disagrees with the such assertion of the Office Action, because claim 16 has, for example, a feature "**the frames comprise pixels, and where such pixels are grouped in blocks of pixels, each block being represented as a single average pixel**", which is not recited in claim 1. The Office Action does not point out and Applicant cannot find which part of Monroe or Pavilids teaches or suggest such feature of claim 16. Thus, even combined, Monroe

and Pavlids do not teach or suggest such feature of claim 16, accordingly do not teach or suggest each and every element of claim 16. Thus, Monroe and Pavlids do not render claim 16 obvious.

Claims 17-26 directly or indirectly depend on claim 16. Thus, for at least the same reasons discussed for claim 16, Applicant submits that Monroe and Pavlids do not render claims 17-26 obvious.

Applicant respectfully requests reconsideration and allowance of claims 16-26.

RESERVATION OF RIGHTS

In the interest of clarity and brevity, Applicant may not have addressed every assertion made in the Office Action. Applicant's silence regarding any such assertion does not constitute any admission or acquiescence. Applicant reserves all rights not exercised in connection with this response, such as the right to challenge or rebut any tacit or explicit characterization of any reference or of any of the present claims, the right to challenge or rebut any asserted factual or legal basis of any of the rejections, the right to swear behind any cited reference such as provided under 37 C.F.R. § 1.131 or otherwise, or the right to assert co-ownership of any cited reference. Applicant does not admit that any of the cited references or any other references of record are relevant to the present claims, or that they constitute prior art. To the extent that any rejection or assertion is based upon the Examiner's personal knowledge, rather than any objective evidence of record as manifested by a cited prior art reference, Applicant timely objects to such reliance on Official Notice, and reserves all rights to request that the Examiner provide a reference or affidavit in support of such assertion, as required by MPEP § 2144.03. Applicant reserves all rights to pursue any cancelled claims in a subsequent patent application claiming the benefit of priority of the present patent application, and to request rejoinder of any withdrawn claim, as required by MPEP § 821.04.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 371-2140 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

RIDA M. HAMZA ET AL.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. Box 2938
Minneapolis, MN 55402
(612) 371-2140

Date July 17, 2007

By _____
David D'Zurilla
Reg. No. 36,976

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 17th day of July, 2007.

Dawn M. Pole
Name

Dawn M. Pole
Signature